The MEANS Procedure

Variable	Label	N	N Miss	Mean	Minimum	Maximum
hispanic	hispanic = 1 if the person is Hispanic regardless of race	17292	0	0.198	0.000	1.000
black	Black = 1 if the person is black and is not Hispanic, and = 0 otherwise	17292	0	0.101	0.000	1.000
asian	Asian = 1 if the person is Asian and is not Hispanic, and = 0 otherwise	17292	0	0.065	0.000	1.000
other	Other = 1 if the person is of another race and is not Hispanic	17292	0	0.016	0.000	1.000
citizen	= 1 if citizen; = 0 otherwise	17292	0	0.902	0.000	1.000
married	= 1 if married; = 0 otherwise	17292	0	0.718	0.000	1.000
widowed	= 1 if widowed; = 0 otherwise	17292	0	0.010	0.000	1.000
divorced	= 1 if divorced; = 0 otherwise	17292	0	0.099	0.000	1.000
separated	= 1 if separated; = 0 otherwise	17292	0	0.026	0.000	1.000
Female	female = 1 for females and = 0 for males	17292	0	0.465	0.000	1.000
Earned_Income	is equal to PEARNVAL;Income Earned in a Year	17292	0	57706.743	1208.000	296000.000
educ_eq_hs	= 1 if education= high school degree; = 0 otherwise	17292	0	0.245	0.000	1.000
educ_some_college	= 1 if if education beyond high school but less than bachelors degree; =	17292	0	0.171	0.000	1.000
educ_college	0 otherwise	17292	0	0.364	0.000	1.000
educ_ma	= 1 if college graduate; = 0 otherwise	17292	0	0.112	0.000	1.000
educ_prof_phd	= 1 if if masters degree; = 0 otherwise	17292	0	0.032	0.000	1.000
educ_cat	= 1 if if professional or doctoral degree; = 0 otherwise	17292	0	3.291	1.000	6.000
poor_health		17292	0	0.066	0.000	1.000
miss_earn	= 1 if health status is fair or poor and is = 0 otherwise	17292	0	0.239	0.000	1.000
miss_demo	=1 if missing earnings information.	17292	0	0.338	0.000	1.000
miss_demo_earn	=1 if missing demographic information	17292	0	0.351	0.000	1.000
northeast	=1 if miss_earn or miss_demo =1	17292	0	0.157	0.000	1.000
midwest	Northeast Region	17292	0	0.198	0.000	1.000
west	Midwest Region	17292	0	0.285	0.000	1.000
median_income	West Region	17292	0	46800.583	35501.000	75000.000
educyrs	State Median Income	17292	0	14.076	1.000	20.000
educyrs12	Years of Education	17292	0	2.076	-11.000	8.000
age18	Years Education - 12	17292	0	23.841	1.000	42.000
	Age - 18					

Histogram of Earned Income

Vertical Bar Chart of Years of Education

Vertical Bar Chart of Education Categories

Scatter Plot of Years of Education and Earned Income
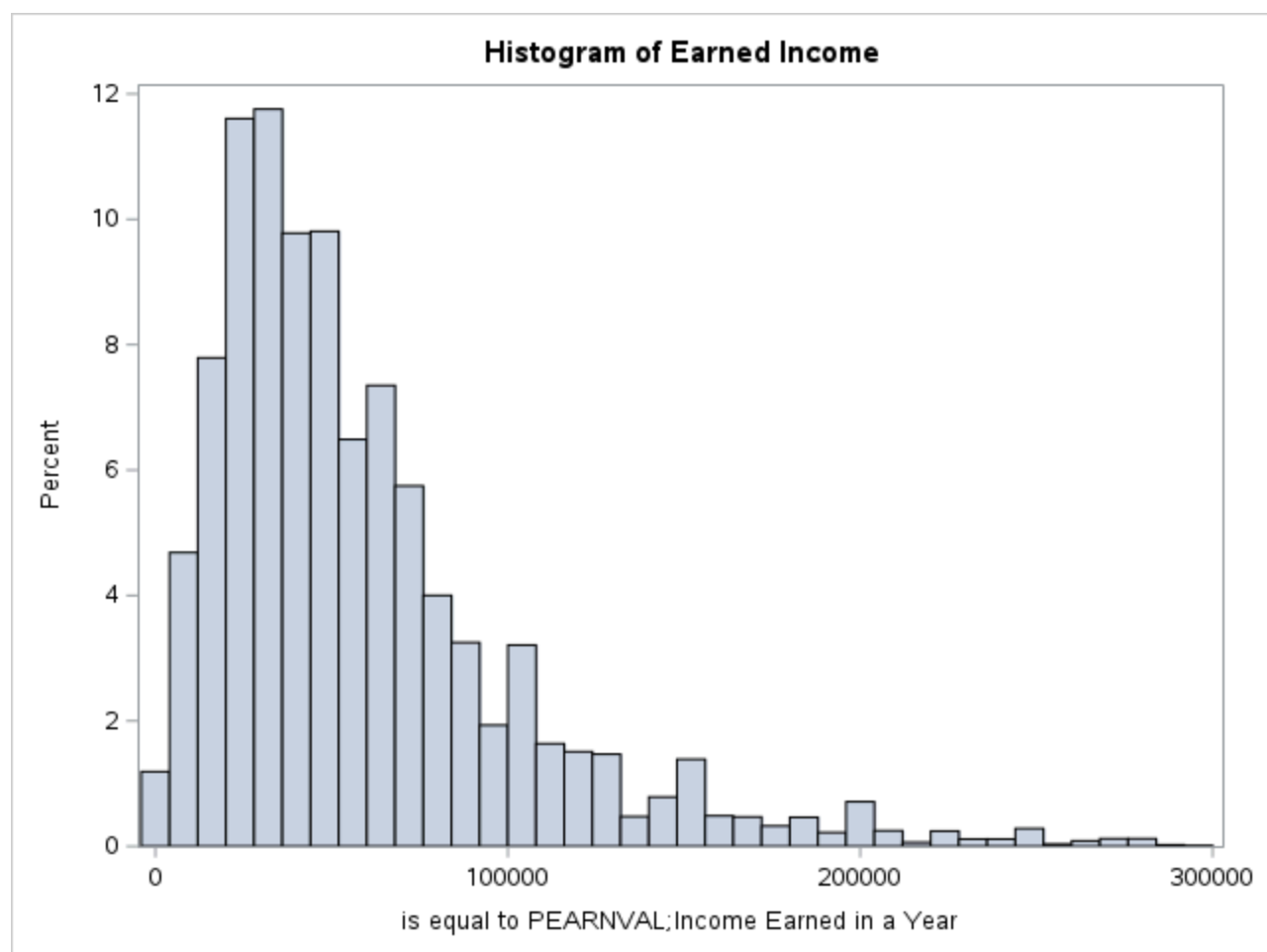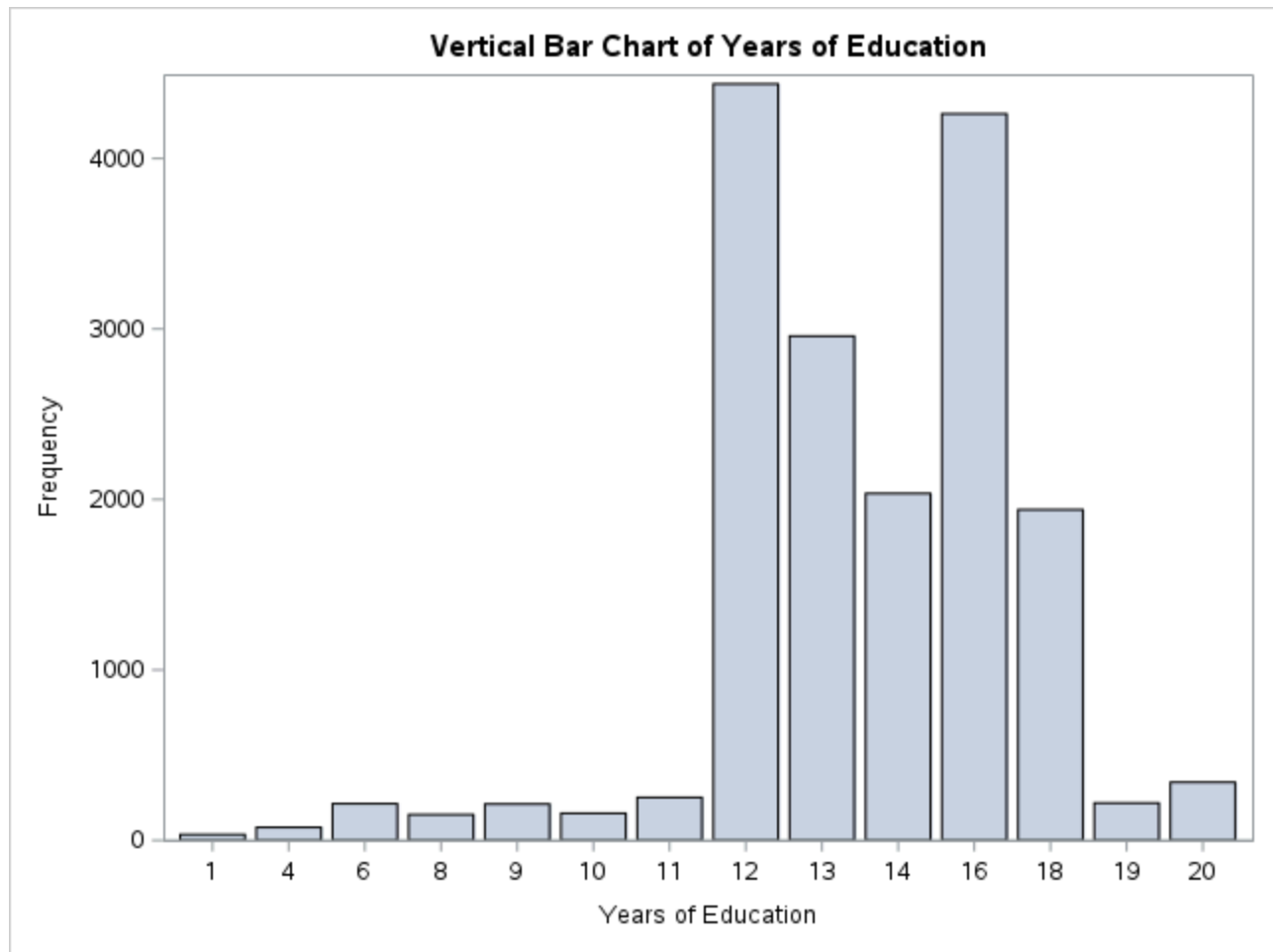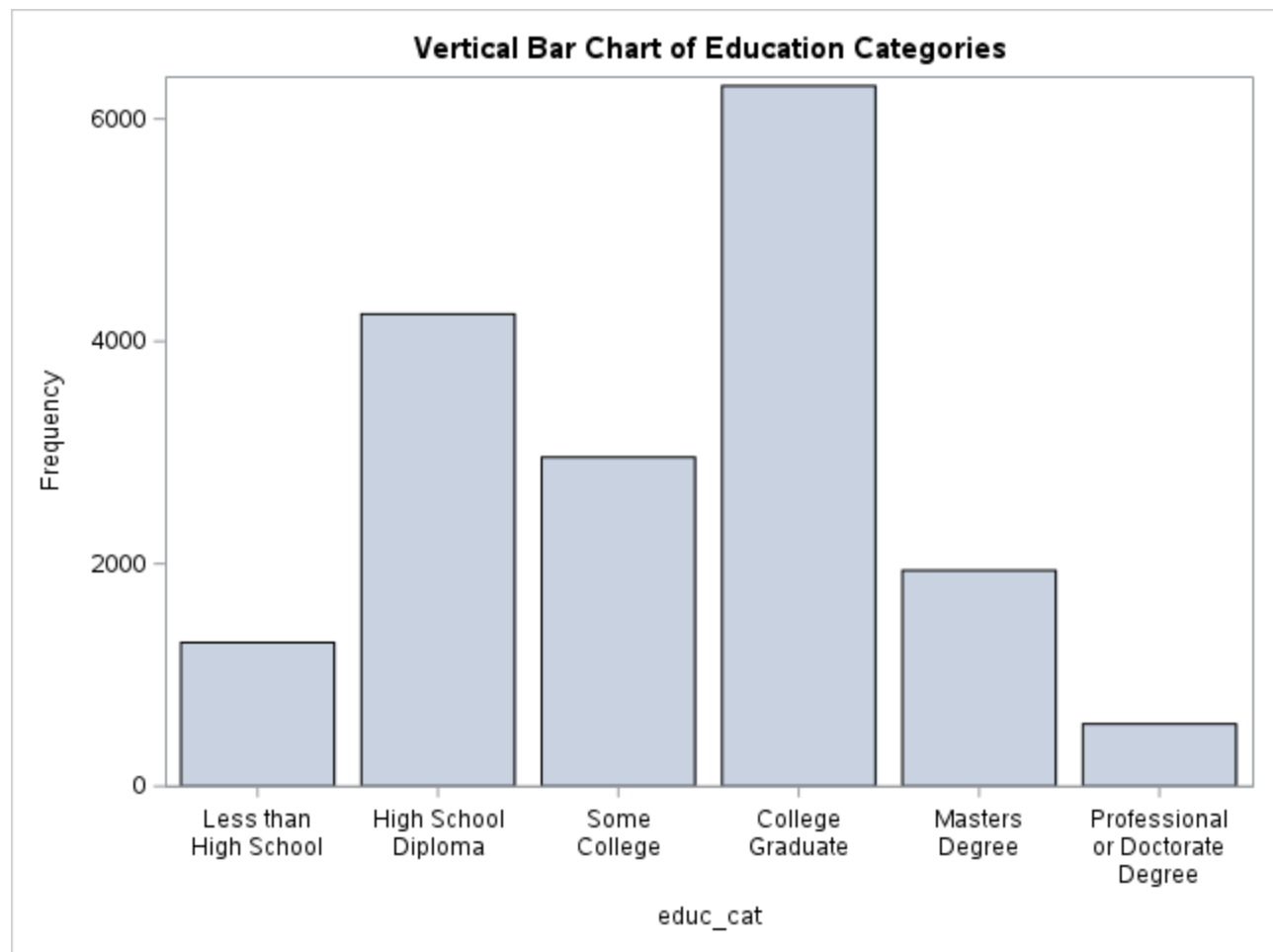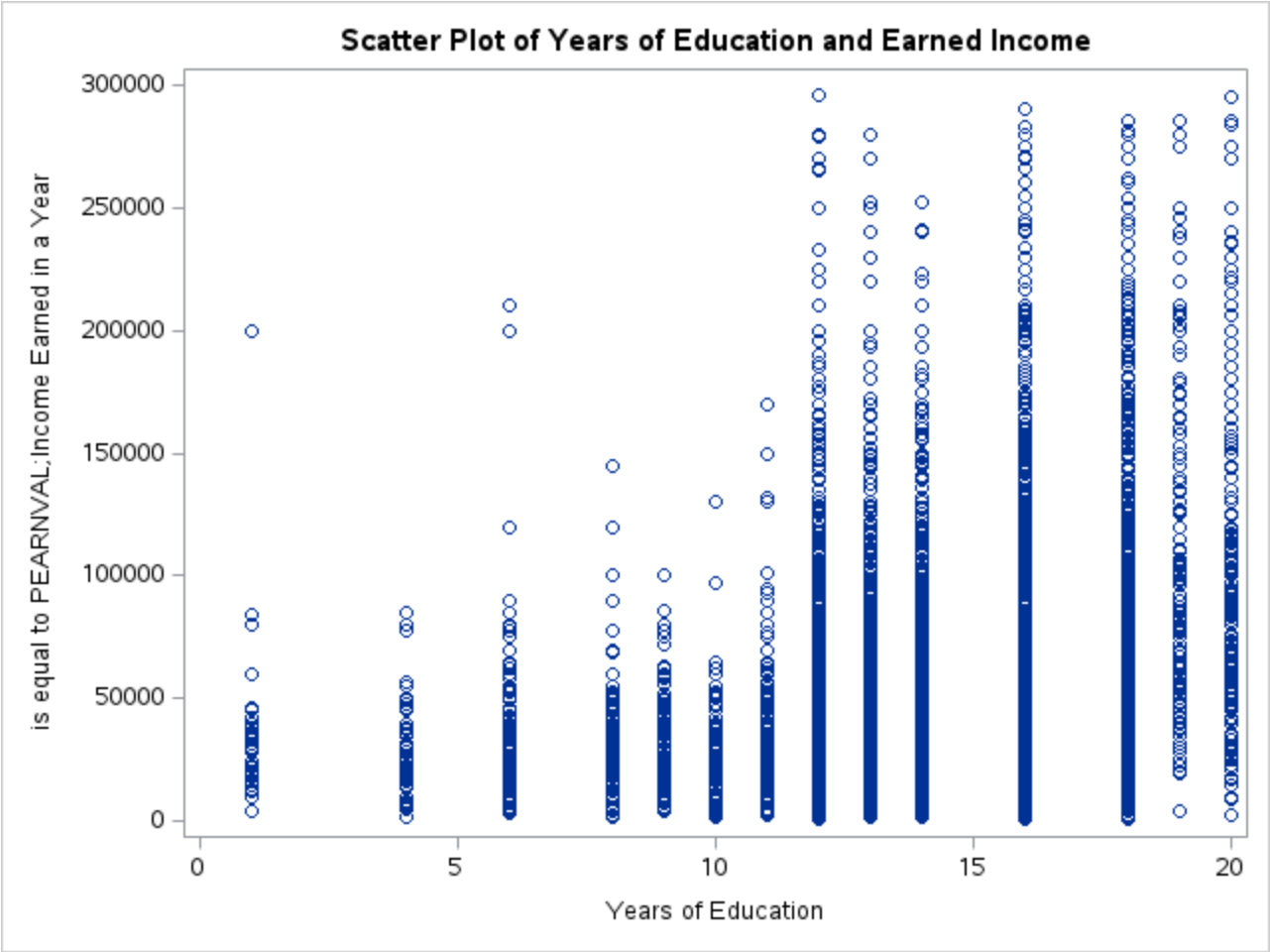
Average Earned Income by Education Categories

The MEANS Procedure

Analysis Variable : Earned_Income is equal to PEARNVAL;Income Earned in a Year						
educ_cat	N Obs	N	N Miss	Mean	Minimum	Maximum
Less than High School	1292	1292	0	31126.204	1400.000	220000.000
High School Diploma	4245	4245	0	42353.254	1244.000	296000.000
Some College	2958	2958	0	46411.736	1500.000	280000.000
College Graduate	6297	6297	0	65459.421	1208.000	290000.000
Masters Degree	1940	1940	0	85546.693	1250.000	285000.000
Professional or Doctorate Degree	560	560	0	111456.986	2250.000	295000.000
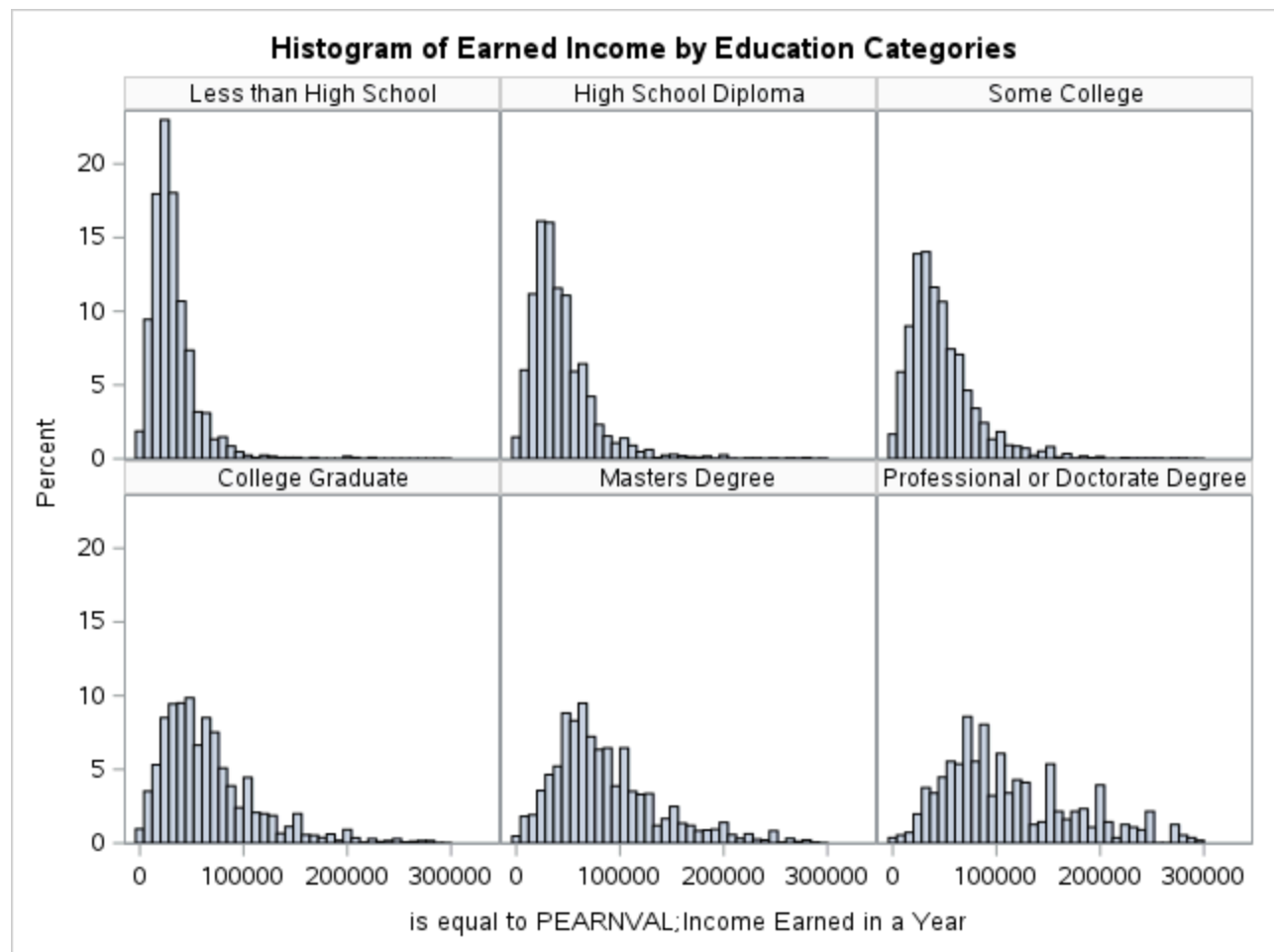
Histogram of Earned Income by Education Categories

Table of Cross Tabulations of miss_demo and miss_earn

Obs	miss_demo	miss_earn	COUNT	PERCENT
1	Not Allocated/Imputed	Not Allocated/Imputed	11271	65.1804
2	Not Allocated/Imputed	Allocated/Imputed	170	0.9831
3	Allocated/Imputed	Not Allocated/Imputed	1896	10.9646
4	Allocated/Imputed	Allocated/Imputed	3955	22.8718

Regression with Earned Income and Years of Education -12

The REG Procedure
Model: MODEL1
Dependent Variable: Earned_Income is equal to PEARNVAL;Income Earned in a Year

Number of Observations Read	17292
Number of Observations Used	17292

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	5.636286E12	5.636286E12	3384.74	<.0001
Error	17290	2.879141E13	1665206100		
Corrected Total	17291	3.44277E13			

Root MSE		40807	R-Square	0.1637

Dependent Mean	57707	Adj R-Sq	0.1637
Coeff Var	70.71433		

Parameter Estimates						
Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	1	43993	389.69120	112.89	<.0001
educyrs12	Years Education - 12	1	6606.80112	113.56087	58.18	<.0001

Table of Cross Tabulations of miss_demo and miss_earn

Obs	miss_demo	miss_earn	COUNT	PERCENT
1	Allocated/Imputed	Allocated/Imputed	3955	100

Multiple Regression Without Imputed/Allocated Demographic or Earnings Data

The REG Procedure
Model: MODEL1
Dependent Variable: Earned_Income is equal to PEARNVAL;Income Earned in a Year

Number of Observations Read	11271
Number of Observations Used	11271

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	21	7.103432E12	3.382587E11	238.45	<.0001
Error	11249	1.595746E13	1418567295		
Corrected Total	11270	2.30609E13			

Root MSE	37664	R-Square	0.3080
Dependent Mean	59532	Adj R-Sq	0.3067
Coeff Var	63.26682		

Parameter Estimates						
Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	1	-10000	3717.16166	-2.69	0.0072
educ_eq_hs	= 1 if education= high school degree; = 0 otherwise	1	8175.68143	1721.10941	4.75	<.0001
educ_some_college	= 1 if if education beyond high school but less than bachelors degree; = 0 otherwise	1	13295	1790.11572	7.43	<.0001
educ_college	= 1 if college graduate; = 0 otherwise	1	29683	1696.92645	17.49	<.0001
educ_ma	= 1 if if masters degree; = 0 otherwise	1	47570	1903.51367	24.99	<.0001
educ_prof_phd	= 1 if if professional or doctoral degree; = 0 otherwise	1	69526	2449.27208	28.39	<.0001
age18	Age - 18	1	514.51682	38.33948	13.42	<.0001
poor_health	= 1 if health status is fair or poor and is = 0 otherwise	1	-10842	1506.04640	-7.20	<.0001
Female	female = 1 for females and = 0 for males	1	-25188	747.68310	-33.69	<.0001
black	Black = 1 if the person is black and is not Hispanic, and = 0 otherwise	1	-4896.52365	1294.61909	-3.78	0.0002
hispanic	hispanic = 1 if the person is Hispanic regardless of race	1	-7179.07643	1155.39795	-6.21	<.0001
asian	Asian = 1 if the person is Asian and is not Hispanic, and = 0 otherwise	1	1226.11327	1537.23170	0.80	0.4251

Parameter Estimates						
Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
other	Other = 1 if the person is of another race and is not Hispanic	1	-8627.83235	2813.59461	-3.07	0.0022
citizen	= 1 if citizen; = 0 otherwise	1	5034.40892	1535.39017	3.28	0.0010
married	= 1 if married; = 0 otherwise	1	7195.03716	1182.87309	6.08	<.0001
divorced	= 1 if divorced; = 0 otherwise	1	5442.54793	1546.02825	3.52	0.0004
separated	= 1 if separated; = 0 otherwise	1	4430.35985	2493.82653	1.78	0.0757
widowed	= 1 if widowed; = 0 otherwise	1	-1306.90240	3674.99121	-0.36	0.7221
median_income	State Median Income	1	0.77076	0.06283	12.27	<.0001
northeast	Northeast Region	1	-623.13610	1206.97754	-0.52	0.6057
midwest	Midwest Region	1	-1535.76199	998.99239	-1.54	0.1242
west	West Region	1	4119.07499	927.02220	4.44	<.0001

Multiple Regression Without Imputed/Allocated Demographic or Earnings Data (T)

The REG Procedure
Model: MODEL1
Dependent Variable: Earned_Income is equal to PEARNVAL;Income Earned in a Year

Number of Observations Read	11271
Number of Observations Used	11271

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	21	7.103432E12	3.382587E11	238.45	<.0001
Error	11249	1.595746E13	1418567295		
Corrected Total	11270	2.30609E13			

Root MSE	37664	R-Square	0.3080
Dependent Mean	59532	Adj R-Sq	0.3067
Coeff Var	63.26682		

Parameter Estimates						
Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	1	-10000	3717.16166	-2.69	0.0072
educ_eq_hs	= 1 if education= high school degree; = 0 otherwise	1	8175.68143	1721.10941	4.75	<.0001
educ_some_college	= 1 if if education beyond high school but less than bachelors degree; = 0 otherwise	1	13295	1790.11572	7.43	<.0001
educ_college	= 1 if college graduate; = 0 otherwise	1	29683	1696.92645	17.49	<.0001
educ_ma	= 1 if if masters degree; = 0 otherwise	1	47570	1903.51367	24.99	<.0001
educ_prof_phd	= 1 if if professional or doctoral degree; = 0 otherwise	1	69526	2449.27208	28.39	<.0001
age18	Age - 18	1	514.51682	38.33948	13.42	<.0001
poor_health	= 1 if health status is fair or poor and is = 0 otherwise	1	-10842	1506.04640	-7.20	<.0001
Female	female = 1 for females and = 0 for males	1	-25188	747.68310	-33.69	<.0001
black	Black = 1 if the person is black and is not Hispanic, and = 0 otherwise	1	-4896.52365	1294.61909	-3.78	0.0002
hispanic	hispanic = 1 if the person is Hispanic regardless of race	1	-7179.07643	1155.39795	-6.21	<.0001
asian	Asian = 1 if the person is Asian and is not Hispanic, and = 0 otherwise	1	1226.11327	1537.23170	0.80	0.4251
other	Other = 1 if the person is of another race and is not Hispanic	1	-8627.83235	2813.59461	-3.07	0.0022

Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
citizen	= 1 if citizen; = 0 otherwise	1	5034.40892	1535.39017	3.28	0.0010
married	= 1 if married; = 0 otherwise	1	7195.03716	1182.87309	6.08	<.0001
divorced	= 1 if divorced; = 0 otherwise	1	5442.54793	1546.02825	3.52	0.0004
separated	= 1 if separated; = 0 otherwise	1	4430.35985	2493.82653	1.78	0.0757
widowed	= 1 if widowed; = 0 otherwise	1	-1306.90240	3674.99121	-0.36	0.7221
median_income	State Median Income	1	0.77076	0.06283	12.27	<.0001
northeast	Northeast Region	1	-623.13610	1206.97754	-0.52	0.6057
midwest	Midwest Region	1	-1535.76199	998.99239	-1.54	0.1242
west	West Region	1	4119.07499	927.02220	4.44	<.0001

Multiple Regression Without Imputed/Allocated Demographic or Earnings Data (T)

The REG Procedure
Model: MODEL1

Test 1 Results for Dependent Variable Earned_Income

Source	DF	Mean Square	F Value	Pr > F
Numerator	5	5.345197E11	376.80	<.0001
Denominator	11249	1418567295		

Multiple Regression on Imputed/Allocated Demographic or Earnings Data

The REG Procedure
Model: MODEL1
Dependent Variable: Earned_Income is equal to PEARNVAL;Income Earned in a Year

Number of Observations Read	3955
Number of Observations Used	3955

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	21	1.998812E12	95181519914	62.00	<.0001
Error	3933	6.038137E12	1535249658		
Corrected Total	3954	8.036949E12			

Root MSE	39182	R-Square	0.2487
Dependent Mean	56390	Adj R-Sq	0.2447
Coeff Var	69.48436		

Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	1	9761.74703	6411.94139	1.52	0.1280
educ_eq_hs	= 1 if education= high school degree; = 0 otherwise	1	9814.08177	2623.58884	3.74	0.0002
educ_some_college	= 1 if if education beyond high school but less than bachelors degree; = 0 otherwise	1	16648	2858.21264	5.82	<.0001
educ_college	= 1 if college graduate; = 0 otherwise	1	31240	2658.58817	11.75	<.0001

Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
educ_ma	= 1 if if masters degree; = 0 otherwise	1	48855	3230.78720	15.12	<.0001
educ_prof_phd	= 1 if if professional or doctoral degree; = 0 otherwise	1	78802	4586.38438	17.18	<.0001
age18	Age - 18	1	519.70318	65.66533	7.91	<.0001
poor_health	= 1 if health status is fair or poor and is = 0 otherwise	1	-7810.04720	2358.12555	-3.31	0.0009
Female	female = 1 for females and = 0 for males	1	-22108	1320.78968	-16.74	<.0001
black	Black = 1 if the person is black and is not Hispanic, and = 0 otherwise	1	-7207.90705	2065.93660	-3.49	0.0005
hispanic	hispanic = 1 if the person is Hispanic regardless of race	1	-5056.04298	1876.31040	-2.69	0.0071
asian	Asian = 1 if the person is Asian and is not Hispanic, and = 0 otherwise	1	472.26959	2726.43163	0.17	0.8625
other	Other = 1 if the person is of another race and is not Hispanic	1	-9413.73055	5230.23448	-1.80	0.0720
citizen	= 1 if citizen; = 0 otherwise	1	2610.30195	2308.46663	1.13	0.2582
married	= 1 if married; = 0 otherwise	1	6032.49305	1919.81767	3.14	0.0017
divorced	= 1 if divorced; = 0 otherwise	1	1338.58968	2710.43403	0.49	0.6214
separated	= 1 if separated; = 0 otherwise	1	-1286.60363	4140.54553	-0.31	0.7560
widowed	= 1 if widowed; = 0 otherwise	1	-646.54587	6723.75977	-0.10	0.9234
median_income	State Median Income	1	0.40397	0.11220	3.60	0.0003
northeast	Northeast Region	1	-5887.21527	2023.01726	-2.91	0.0036
midwest	Midwest Region	1	190.79243	1796.48049	0.11	0.9154
west	West Region	1	-2284.27424	1686.99928	-1.35	0.1758